

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

VLADIMIR GRUSHIN ET AL.

CASE NO.: PE0649 US DIV8

APPLICATION NO.: UNKNOWN

CONFIRMATION NO.: UNKNOWN

GROUP ART UNIT: UNKNOWN

EXAMINER: UNKNOWN

FILED: CONCURRENTLY HERewith

FOR: ELECTROLUMINESCENT IRIIDIUM COMPOUNDS WITH FLUORINATED  
PHENYLPYRIDINES, PHENYLPYRIMIDINES, AND PHENYLQUINOLINES AND  
DEVICES MADE WITH SUCH COMPOUNDS

**INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information that may be helpful in the examination of the above-identified patent application. All of the information is listed on attached Forms PTO/SB/08A, PTO/SB/08B, and PTO-892.

Benefit of the earlier filing dates of U.S. Patent Application Nos. 10/366,295 filed February 13, 2003 and 09/879,014 filed June 12, 2001 are claimed under 35 U.S.C. 120 for the above-referenced application and information cited in the priority applications is not supplied with this Information Disclosure Statement.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,



MARY ANN CAPRIA

Attorney for Applicants

Registration No. 32,659

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Dated: 11/24/2002

Enclosures

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

Application Number	09/879,014
Filing Date	JUNE 12, 2001
First Named Inventor	VLADIMIR GRUSHIN ET AL.
Group Art Unit	2913
Examiner Name	KIELIN, ERIK J
Attorney Docket Number	PE0649 US NA

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)				
		US -	2001/0019782 A1	09/06/2001	IGARASHI ET AL.	
		US -	2001/0053462 A1	12/20/2001	MISHIMA	
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
		CountryCode <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
		EP	1175128	A2	01/23/2002	FUJI PHOTO FILM CO.		<input type="checkbox"/>
		WO	96/03410	A1	02/08/1996	BOEHRINGER MANNHEIM GMBH		<input type="checkbox"/>
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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
Application Number		09/879,014	
Filing Date		JUNE 12, 2001	
First Named Inventor		VLADIMIR GRUSHIN ET AL.	
Group Art Unit		2913	
Examiner Name		KIELIN, ERIK J	
Attorney Docket Number		PE0649 US NA	

Sheet	2	of	2
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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		DJUROVICH, PETER I. ET AL., Ir(III) Cyclometalated Complexes As Efficient Phosphorescent Emitters in Polymer Blend and Organic LEDs, Polymer Preprints, 2000, 770-771, 41(1)	<input type="checkbox"/>
		CHATANI, NAOTO ET AL., Ru3(CO)12-Catalyzed Reaction of Pyridylbenzenes with Carbon Monoxide and Olefins. Carbonylation at a C-H Bond in the Benzene Ring, J. Org. Chem., 1997, 2604-2610, 62, American Chemical Society	<input type="checkbox"/>
		GOSMINI, CORINNE ET AL., Electrosynthesis of functionalized 2-arylpyridines from functionalized aryl and pyridine halides catalyzed by nickel bromide 2,2'-bipyridine complex, Tetrahedron Letters, 2000, 5039-5042, 41, Elsevier Science Ltd.	<input type="checkbox"/>
		CACCHI, SANDRO ET AL., The Palladium-Catalyzed Transfer Hydrogenation/Heterocyclization of B-(2-Aminophenyl)-a,B-ynones. An Approach to 2-Aryl- and 2-Vinylquinolines, Synlett, 1999, 401-404, No. 4, Thieme Stuttgart, New York	<input type="checkbox"/>
		BALDO, M. A. ET AL., Very high-efficiency green organic light-emitting devices based on electrophosphorescence, Applied Physics Letters, July 5, 1999, 4-6, 75(1) American Institute of Physics	<input type="checkbox"/>
		BALDO, M. A. ET AL., High-efficiency fluorescent organic light-emitting devices using a phosphorescent sensitizer, Nature, February 17, 2000, 750-753, 403, Macmillan Magazines Ltd.	<input type="checkbox"/>
		WANG, YUE ET AL., (Hydroxyphenyl)pyridine derivative, its metal complexes and application as electroluminescence material, Chemical Abstracts Service, March 1, 2000, Database No. 133:315395	<input type="checkbox"/>
		DEDEIAN K. ET AL., A New Synthetic Route to the Preparation of a Series of Strong Photoreducing Agents: fac Tris-Ortho-Metalated Complexes of Iridium(III) with Substituted 2-Phenylpyridines, Inorg. Chem., 1991, 1685-1687, 30(8), American Chemical Society	<input type="checkbox"/>
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Sheet	1	of	1
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**Complete if Known**

Application Number	09/879,014
Filing Date	JUNE 12, 2001
First Named Inventor	VLADIMIR GRUSHIN ET AL.
Group Art Unit	2811
Examiner Name	UNKNOWN
Attorney Docket Number	PE0649 US NA

## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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of

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**Complete if Known**

Application Number	09/879,014
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Filing Date	JUNE 11, 2001
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First Named Inventor	VLADIMIR GRUSHIN ET AL.
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Group Art Unit	2811
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Examiner Name	UNKNOWN
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Attorney Docket Number	PE0649 US NA
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		BALDO, M.A. et al., High-efficiency fluorescent organic light-emitting devices using a phosphorescent sensitizer, Nature, February 17, 2000, 750-753, Vol. 403	
		DJUROVICH, PETER I. et al., Ir(III) Cyclometalated Complexes as Efficient Phosphorescent Emitters in Polymer Blend and Organic LEDs, Polymer Reprints, 2000, 770-771, 41(1)	
		BALDO, M.A. et al., Very high-efficiency green organic light-emitting devices based on electrophorescence, Applied Physics Letters, July 5, 1999, 4-6, 75(1), American Institute of Physics	
		LOHSE, OLIVIER, et al., The Palladium Catalysed Suzuki Coupling of 2- and 4-Chloropyridines, Synlett, 1999, 45-48, No. 1, Thieme Stuttgart, New York	
		BALDO, M.A. et al., Highly efficient phosphorescent emission from organic electroluminescent devices, Nature, September 10, 1998, 151-154, Vol 395	
		DEDEIAN, K. et al., A New Synthetic Route to the Preparation of a Series of Strong Photoreducing Agents: fac Tris-Ortho-Metalated Complexes of Iridium (III) with Substituted 2-Phenylpyridines, Inorganic Chemistry, 1991, 1685-1687, 30(8)	

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<b>Notice of References Cited</b>	Application/Control No. 09/879,014	Applicant(s)/Patent Under Reexamination GRUSHIN ET AL	
	Examiner Erik Kielin	Art Unit 2813	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-3,718,488	02-1973	Trofimenko et al.	106/1.28
	B	US-2002/0064681 A1	09-2001	Takiguchi et al.	428/690
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
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	K	US-			
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	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages)
X	U	Thompson et al. "Ir(III) cyclometalated complexes as efficient phosphorescent emitters in polymer blend organic LEDs" Polymer Preprints 41(1), 2000, pp. 770-771.
X	V	Dedeian et al. "A new synthetic route to the preparation of a series of strong photoreducing agents: fac tris-ortho-metalated complexes of iridium(III) with substituted 2-phenylpyridines" Inorganic Chemistry, Vol. 30, 1991, 1685-1687.
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